



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,570	05/14/2004	Tzu-Feng Tseng	PMXP0187USA	3569
43831 7590 02/23/2007 BERKELEY LAW & TECHNOLOGY GROUP, LLP 1700 NW 167TH PLACE SUITE 240 BEAVERTON, OR 97006			EXAMINER LANDRUM, EDWARD F	
			ART UNIT 3724	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/709,570	Applicant(s) TSENG, TZU-FENG	
	Examiner Edward F. Landrum	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 7, 13 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 6, 8-12, 19 and 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 6, 8, 9, 11, 19, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spaulding (U.S Patent No. 3,301,117) in view of Kimura et al (U.S Patent No. 4,965,733), hereinafter Kimura.

Spaulding teaches (see Figures 1-5, and 8) a flat media cutting device comprising: a planar base (15); two supports (20) extending normal to the plane of the base; a clamp (11) that extends parallel and between the two supports (20), the clamps thereby prevent movement of the clamp parallel to the plane of the base but allow movement perpendicular to the plane of the base; and a slider (30, 31, and 70) is mounted in a slidable manner on the clamp (11, see Figure 4) and contains a cutting tool (45). Furthermore, Spaulding teaches that the cutting tool (45) moves up and down with the clamping member (see Figure 4).

Spaulding teaches all of the elements of the current invention as stated above except the use of a linear actuator, driven by a transmission and a motor, to drive the cutting tool across the clamped surface. More specifically the linear actuator is a belt, and the slider is connected to the belt by a pinned connection. The transmission is a

friction drive comprising a belt. Furthermore a switch is used to control the power of the motor.

Kimura teaches (see Figure 2) that it is old and well known in the cutting art to use a linear actuator made of a belt (22) to drive a cutting member (48) across a flat material to be cut. Furthermore, Kimura teaches the use of a motor (25), and a friction belt transmission (28) to power the linear actuator (22). Lastly, Kimura teaches cutting member (48) is capable of being moved in a direction perpendicular to the cutting direction (Col. 2, lines 29-38).

Although Kimura does not explicitly teach the motor comprising a switch to control the power to the cutting device the examiner takes official notice that the use of a switch in relation to providing power to a motor is inherent in the design of the motor, since a switch can be defined as the ability pull an electrical cord in and out of a socket.

It would have been obvious to have modified Spaulding to incorporate the teachings of Kimura to provide a motorized means to move the cutting member along the clamping member and further allow the slider to move with the clamp in a direction perpendicular to the cutting direction. Providing a belt drive and an actuation device would allow a user to stand away from the cutting device during the cutting process thereby preventing the user from cutting him or herself by accidentally sliding the cutting blade over his or her fingers. Providing means to allow the cutting member to follow the perpendicular movements of the clamping member would create a more precise cut and eliminate the need for a user to check the height of the blade when the clamp is moved thereby allowing the blade to easily cut through all clamped material. Furthermore,

Art Unit: 3724

providing a motorized means to move the cutting member along the clamping member would help to automate the cutting process and it is well settled that it is not an "invention" to provide a mechanical or automatic means to replace a manual activity that has accomplished the same result.

It would have been an obvious design choice to modify the modified device of Spaulding by having the slider connect to the belt via a pinned connection, since the applicant has not disclosed that having a specific connection between the sliding device and the belt solves any stated problem or is for any particular purpose and it appears the cutting device would perform equally well with the sliding device connected by any means that allows the sliding device to move in the perpendicular direction.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified device of Spaulding in view of Samuelsson (U.S Patent No. 4,604,802).

The modified device of Spaulding teaches all of the elements of the current invention as stated above except the use of a clamp actuator with a handle to move the clamp in the first direction and opposite.

Samuelsson teaches (see Figures 1-3) the use of a clamp actuator (61) with a handle (69) for clamping beams (11 and 13) together.

It would have been obvious to have modified the modified device of Spaulding to incorporate the teachings of Samuelsson to provide a clamping actuator and handle to the clamping mechanism. Adding a clamping actuator would allow the user to clamp the material in the clamping direction then step away from the apparatus to perform the

Art Unit: 3724

cutting operation so the user did not have to hold the clamp down during the entire operation.

4. Claims 12, 21, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified device of Spaulding in view of Hall (U.S. Patent No. 4,864,906).

The modified device of Spaulding teaches all of the elements of the current invention as stated above except the cutting device comprising two detect switches for the purpose of reversing the motor when touched by the slider.

Hall teaches (see Figure 1) the use of two switches (126 and 130) located at each extreme of the horizontal cutting distance of the cutting device. The purpose of each button being to reverse the motor to thereby make the sliding mechanism (28) go the opposite way on the linear actuator (90, Col. 4, lines 45-62).

It would have been obvious to have modified the modified device of Spaulding to incorporate the teachings of Hall to provide two switches capable of being hit by the slider for the purpose of reversing the direction of the slider by reversing the motor. Allowing the slider to reverse automatically would allow the same cut to be cut again thereby making sure that all material to be cut has been cut through entirely.

Response to Arguments

5. Applicant's arguments filed 1/4/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

Art Unit: 3724

combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it is old and well known in the art to provide an electrical/mechanical means to move a cutting tool across the length of a work piece to either make the process safer or further automate the cutting process. The Figures of Spaulding also make it appear that the blade can extend beyond the clamping mechanism and therefore the still is potential for a user to be cut him or herself with the cutting mechanism.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Heller (U.S Patent No. 6,202,527), Stork (U.S Patent No. 4,785,698), Austin (U.S Patent No. 1,434,475), Martin (U.S Patent No. 3,897,706), and Lundgren (U.S Patent No. 4,833,957) all teach flat material cutting mechanisms pertinent to the instant application.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 3724

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward F. Landrum whose telephone number is 571-272-5567. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EFL
2/6/2007


BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER